

## ARG66986 anti-Desmin antibody

Package: 100 µl  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody recognizes Desmin
Tested Reactivity	Hu, Ms
Tested Application	ICC/IF, IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a
Target Name	Desmin
Conjugation	Un-conjugated
Alternate Names	LGMD2R; CSM1; Desmin; CSM2

### Application Instructions

Application table	Application	Dilution
	ICC/IF	1:100 - 1:200
	IHC-P	1:50 - 1:100
	WB	1:500 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Heart; C2C12	
Observed Size	~ 54 kDa	

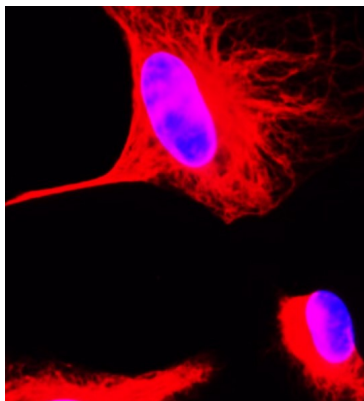
### Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.2) and 0.09% Sodium azide.
Preservative	0.09% Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

### Bioinformation

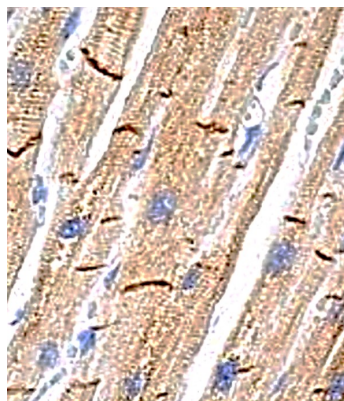
Gene Symbol	DES
Gene Full Name	desmin
Background	This gene encodes a muscle-specific class III intermediate filament. Homopolymers of this protein form a stable intracytoplasmic filamentous network connecting myofibrils to each other and to the plasma membrane. Mutations in this gene are associated with desmin-related myopathy, a familial cardiac and skeletal myopathy (CSM), and with distal myopathies. [provided by RefSeq, Jul 2008]
Function	Muscle-specific type III intermediate filament essential for proper muscular structure and function. Plays a crucial role in maintaining the structure of sarcomeres, inter-connecting the Z-disks and forming the myofibrils, linking them not only to the sarcolemmal cytoskeleton, but also to the nucleus and mitochondria, thus providing strength for the muscle fiber during activity (PubMed:25358400). In adult striated muscle they form a fibrous network connecting myofibrils to each other and to the plasma membrane from the periphery of the Z-line structures (PubMed:24200904, PubMed:25394388, PubMed:26724190). May act as a sarcomeric microtubule-anchoring protein: specifically associates with detyrosinated tubulin-alpha chains, leading to buckled microtubules and mechanical resistance to contraction. Contributes to the transcriptional regulation of the NKX2-5 gene in cardiac progenitor cells during a short period of cardiomyogenesis and in cardiac side population stem cells in the adult. Plays a role in maintaining an optimal conformation of nebulin (NEB) on heart muscle sarcomeres to bind and recruit cardiac alpha-actin (By similarity). [UniProt]
Calculated Mw	54 kDa
PTM	ADP-ribosylation prevents ability to form intermediate filaments. [UniProt]
Cellular Localization	Cytoplasm, myofibril, sarcomere, Z line. Cytoplasm. Cell membrane, sarcolemma. Nucleus. Note=Localizes in the intercalated disks which occur at the Z line of cardiomyocytes (PubMed:24200904, PubMed:26724190). Localizes in the nucleus exclusively in differentiating cardiac progenitor cells and premature cardiomyocytes (By similarity). [UniProt]

## Images



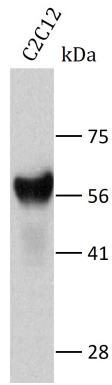
ARG66986 anti-Desmin antibody ICC/IF image

Immunofluorescence: SJRH30 cells were fixed with 4% paraformaldehyde at RT for 10 min, permeabilized with 0.1% NP-40 at RT for 10 min and then cells were blocked with 5% BSA at RT for 30 min and stained with ARG66986 anti-Desmin antibody (red) at 1:200 dilution at 4°C for overnight. DAPI (blue) was used for nuclear staining.



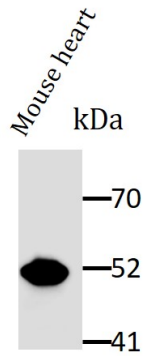
ARG66986 anti-Desmin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human heart tissue stained with ARG66986 anti-Desmin antibody at 1:100 dilution.



ARG66986 anti-Desmin antibody WB image

Western blot: 50  $\mu$ g of C2C12 cell lysate stained with ARG66986 anti-Desmin antibody at 1:1000 dilution, overnight at 4°C.



ARG66986 anti-Desmin antibody WB image

Western blot: 50  $\mu$ g of Mouse heart tissue lysate stained with ARG66986 anti-Desmin antibody at 1:1000 dilution, overnight at 4°C.